

Title (en)

METHOD FOR THE PRODUCTION OF AQUEOUS DISPERSIONS OF CARBOXYLATED STYRENE/ESTER COPOLYMERS

Publication

EP 0070355 B2 19900214 (DE)

Application

EP 82102863 A 19820403

Priority

DE 3128448 A 19810718

Abstract (en)

[origin: EP0070355A1] 1. A process for preparing an aqueous dispersion of a carboxylated styrene/ester copolymer by semicontinuous emulsion polymerisation using a monomer feed method involving at least two separated feed flows, the process having the following features : 1 50 to 85% by weight of the amount of water required in total and 10 to 50% by weight of the total amount of emulsifier are introduced first ; 2 into this mixture flows having the following compositions are fed under conventional reaction conditions, namely : 2.1 a monomer mixture comprising 2.1.1 33.5 to 65 parts by weight of a hardening component selected from styrene and substituted styrene, and 2.1.2 33.5 to 65 parts by weight of a softening component selected from C2 -to C8 -alkyl acrylates, di-(C2 - to C6 -alkyl) fumarates and a mixture of the latter and up to 15 parts by weight of butadiene or 2-ethylhexyl acrylate ; 2.2 an aqueous solution of 2.2.1 1 to 5 parts by weight of a copolymerisable alpha,beta-olefinically unsaturated carboxylic acid, 2.2.2 0.5 to 2 parts by weight of the amide of such an acid, and 2.2.3 50 to 90% by weight of the total amount of emulsifier, the water content being 7 to 30% by weight of the total amount of water ; and 2.3 an aqueous solution of 0.5 to 2 parts by weight of a water-soluble initiator, the water content being 8 to 30% by weight of the total amount of water, the parts by weight being in each case relative to 100 parts by weight of the total amount of monomer mixture, characterised in that the feed of the flows is not started at the same time, but - the feed of the flows in accordance with features 2.1 and 2.2 or of the flow based on the sum of the compositions in accordance with features 2.1 and 2.2 is started first, followed - at least 0.5 min. later by the start of the feed of the flow in accordance with feature 2.3.

IPC 1-7

C08F 212/08; **C08F 2/24**

IPC 8 full level

C08F 2/24 (2006.01); **C08F 2/26** (2006.01); **C08F 212/08** (2006.01)

CPC (source: EP)

C08F 2/24 (2013.01); **C08F 212/08** (2013.01)

Cited by

EP0538571A1; WO9820048A3

Designated contracting state (EPC)

DE FR GB IT NL SE

DOCDB simple family (publication)

EP 0070355 A1 19830126; **EP 0070355 B1 19850724**; **EP 0070355 B2 19900214**; DE 3128448 A1 19830127; DE 3128448 C2 19830929; DE 3264855 D1 19850829; DK 320282 A 19830119; NO 822108 L 19830119

DOCDB simple family (application)

EP 82102863 A 19820403; DE 3128448 A 19810718; DE 3264855 T 19820403; DK 320282 A 19820716; NO 822108 A 19820623